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CENTRAL FAX CENTER

APR 25 2008

REMARKS

Claim 33 is added. Claims 17-33, as amended, remain in the application. No new matter is added by the amendments to the claims.

The Rejection:

In the Office Action dated January 25, 2008, the Examiner rejected Claims 17-32 under 35 U.S.C. 103(a) as being unpatentable over Conte (US 6,658,726) in view of Long (US 5,740,608).

The Examiner stated that "Conte discloses in Fig. 1 8-11 and 22 of different cable-end processing stations and 22 being a double crimping unit; 5-6 provide cables and belt drives; 7 is the swiveling arm and gripper; Fig. 8 shows a turntable with a belt drive below 46 and 47; 14 is a cable transportation belt, except for Conte's 7 being a sole means for holding and moving respectively the leading and trailing cable-ends of the cable length.

The Examiner further stated that "Long discloses in Figs. 9-11 a conveyor belt 88 being a sole means for holding and moving respectively the leading and trailing cable-ends of the cable length."

According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Conte by providing a sole means for holding and moving respectively the leading and trailing cable-ends of the cable length, as taught by Long, for the purpose of making and stacking electrical leads.

The Response:

Applicant added Claim 33 which recites a cable-processing machine for processing a cable into cable-lengths with a leading cable-end and a trailing cable-end at opposite extents of the cable-lengths to which crimped contacts are attached comprising:

- a belt-drive 4 for providing the cable 5;
- a cutting and stripping station 6 for cutting the cable-length 5.3 from the cable and stripping leading and trailing ends of the cable-length to form the leading cable-end 5.1 and the trailing cable-end 5.2 respectively;

a pair of crimping presses 3.1, 3.2 for attaching a crimped contact 9 to each of the leading and trailing cable-ends a one of the crimped contacts;

a transportation belt 7 for receiving the leading end;

a cable tray 8 for receiving the cable-length; and

a swiveling device 2 positioned adjacent said belt-drive, said crimping presses, said transportation belt and said cable tray, said swiveling device having a swiveling arm 2.1 with a gripper 2.2 at one end for sequentially holding the leading and trailing cable-ends being a sole means for moving the leading and trailing cable-ends from said cutting and stripping station to said crimping presses, said transportation belt and said cable tray, wherein said gripper holds the leading end while said swiveling device rotates in a first direction to said crimping presses for processing to attach a crimped contact on the leading end, said swiveling device rotates further in the first direction to said transportation belt and said gripper releases the leading end on said transportation belt, said swiveling device rotates in a second direction, opposite said first direction, to said cutting and stripping station and said gripper holds the trailing end, said swiveling device rotates in the first direction to said crimping presses for processing to attach a crimped contact on the trailing end, and said swiveling device rotates further in the first direction to said cable tray and said gripper releases the trailing end on said cable tray causing the cable-length to transfer from said transportation belt to said cable tray.

Support for Claim 33 is found in the specification from Line 15 on Page 3 through Line 27 on Page 4 and in Figs. 1-6.

There is no combination of Conte and Long that shows or suggests the invention recited in Applicants' Claim 33.

The Examiner stated that Conte discloses: different cable-end processing stations including a double crimping unit 22; cables and belt drives 5, 6; swiveling arm and gripper 7; a turntable with a belt drive below 46 and 47; a cable transportation belt 14. The Examiner admits that Conte's swiveling arm and gripper 7 is not a sole means for holding and moving respectively the leading and trailing cable-ends of the cable length.

Attached is Fig. 1 from Conte that shows a cable deposit device 1 connected to an automatic cable processing unit 2 whereby cables 3, 4 that have been processed by the unit 2 may be deposited separately for the manufacture of double crimped cables 25 or two single conductors having different diameters (Col. 2, Lines 19-26). Two belt drives 5, 6 supply the two cables 3, 4 to a pivot head 7 that supplies the leading cable-end of each of two cables 3, 4 to one or more processing stations 8 to 11 for stripping and attaching a crimp contact (Col. 2, Lines 27-31). Note that the trailing cable-ends of the two cables 3, 4 have not yet even passed through the belt drive units 5 and 6.

After the processing, the leading cable-ends of the cables 3, 4 are ejected from the pivot head 7 into the cable deposit device 1 (Col. 2, Lines 32-34). A conveyor 14 receives and stretches out the entire cables 3, 4 in a region 15 (Col. 2, Lines 35-47). Thus, the pivot head 7 moves only the leading ends of the cables 3, 4 and releases the cables entirely after the crimp contacts have been installed on the leading cable-ends.

A separate pivot arm 21 with gripping units 19, 20 is positioned at the entry to the conveyor 14 to grip the now free trailing cable-ends of the cables 3, 4 and supply them to a stripping unit 42, a unit 43 for bringing the cable ends together and a double crimping unit 22. The pivot arm 21 moves only the rear or trailing cable-ends of the cables 3, 4.

The pivot head 7 is not capable of holding the trailing cable-ends of the cables 3, 4. As can be seen in Fig. 1, the cables 3 and 4 are guided through flexible tubes (the thicker lines between the drive units 5 and 6 and the pivot head 7). Not only are the trailing cable-ends not exposed prior to being ejected from the pivot head 7, but the flexible guide tubes prevent the pivot head from rotating to a position where the trailing cable-ends could be presented to the processing stations 8-11.

Applicant's Claim 17 recites "a gripper mounted at one end of said swiveling arm for holding in sequence each of the leading cable-end and the trailing cable-end of the cable-length to be processed, said swiveling arm moving said gripper from said cutting and stripping station to said at least one cable-end processing station and then away from said at least one cable-end processing station, said gripper and said swiveling arm being a sole means for holding and moving respectively the leading and trailing cable-ends of the cable-length in position for cutting

and stripping by said cutting and stripping station and for processing by said at least one cable-end processing station.” The Conte prior art structure is not capable of performing the function of “holding and moving respectively the leading and trailing cable-ends of the cable-length in position for cutting and stripping by said cutting and stripping station and for processing by said at least one cable-end processing station”.

Applicant’s Claim 26 recites “a swiveling device positioned adjacent said cutting and stripping station and said crimping presses, said swiveling device having a swiveling arm with a gripper at one end for sequentially holding the leading and trailing cable-ends in position for cutting and stripping by said cutting and stripping station and for processing by said at least one cable-end processing station, said swiveling arm being a sole means for moving the leading and trailing cable-ends from said cutting and stripping station to said crimping presses and away from said crimping presses.” The Conte prior art structure is not capable of performing the function of “sequentially holding the leading and trailing cable-ends in position for cutting and stripping by said cutting and stripping station and for processing by said at least one cable-end processing station, and moving the leading and trailing cable-ends from said cutting and stripping station to said crimping presses and away from said crimping presses”.

As stated above, the Examiner admits that the Conte pivot head 7 is not the “sole means for holding and moving respectively the cable-ends”. However, the Examiner stated that Long discloses in Figs. 9-11 a conveyor belt 88 being a sole means for holding and moving respectively the leading and trailing cable-ends of the cable length. According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Conte by providing a sole means for holding and moving respectively the leading and trailing cable-ends of the cable length, as taught by Long, for the purpose of making and stacking electrical leads.

Attached is Fig. 3 from Long that shows a machine 50 for making electrical leads 66 having a feed side terminator 62, an ejection side terminator 64 and a wire cutting and stripping unit 68. A feed side clamp 70 grips the first end 72 of the wire 56, after the cutting and stripping unit 68 has cut and stripped the wire, and transfers the first end to the feed side terminator for attachment of a terminal 74. An eject side clamp 76 grips the second end 78 of the wire 56, after

the cutting and stripping unit 68 has cut and stripped the wire, and transfers the second end to the eject side terminator for attachment of a terminal 80 to finish the lead 66. After the lead 66 is finished, a clamp 102 grips the first end 72 and bends the lead 66 to form a U-shaped portion 110 in the middle. The U-shaped portion 110 is then contacted by one of the projections 90 on the conveyor belt 88 to be transported to a stacking tray 100.

Contrary to the Examiner's statement, the Long conveyor belt 88 does not hold the leading and trailing cable-ends of the cable length 66. As is clearly seen in Fig. 3, the first end 72 and the second end 78 rest on the upper surface of the stacking tray 100 and do not contact the conveyor belt 88. Prior to that, the ends of the cable length 66 hang freely on opposite sides of the conveyor belt 88 as shown in attached Fig. 5 of Long. Therefore, the Long conveyor belt 88 is not the "sole means for holding and moving respectively the leading and trailing cable-ends of the cable-length in position for cutting and stripping by said cutting and stripping station and for processing by said at least one cable-end processing station" as recited in Claim 17, nor the "sole means for moving the leading and trailing cable-ends from said cutting and stripping station to said crimping presses and away from said crimping presses" as recited in Claim 26.

The Examiner has not explained how to modify Conte by providing a sole means for holding and moving respectively the leading and trailing cable-ends of the cable length, as taught by Long, for the purpose of making and stacking electrical leads. Obviously the Long conveyor belt 88 can't replace the Conte swiveling arm and gripper 7 and pivot arm 21 with gripping units 19, 20 since the belt 88 can't hold the cable ends in position for processing by the cable-end processing station as recited in Applicant's claims. Conte has a conveyor belt 14 that is the equivalent of the Long belt 88. Furthermore, the Long belt 88 carries the first and second ends 72, 78 of the cable length 66 simultaneously. In contrast, Applicant's claims recite that the cable ends are held in sequence.

Thus, there is no combination of Conte and Long that shows or suggests the invention recited in Applicant's Claims 17-33.

In view of the above arguments, Applicant believes that the claims of record now define patentable subject matter over the art of record. Accordingly, an early Notice of Allowance is respectfully requested.